Governor's Energy Efficiency and Renewables Task Force Building Codes and Standards Workgroup Meeting Minutes

Tuesday, April 13, 2004

Conference room 6B (6th floor) in the Department of Administration Building, 101 E. Wilson Street, Madison

Present: Jim Boullion, David Simon, Randy Schneider, Doug Johnson, Sen. Fred Risser Guests: Keith Reopelle Norman Bair, Don Hynek, Jim Mapp, Division of Energy,

Abby Vogen, Energy Center of WI, Lisa Roys, representing window

manufacturers

1. Review Minutes and Agenda - David Simon moved and Randy Schneider seconded to approve the minutes as amended.

- 2. Building Code Update Division of Safety and Buildings
 - a. The "Quick Fix" building code update comment period officially ended at the end of March. The majority of these proposals were administrative or to give some relief from imminent problems that were identified with the code update. S&B is reviewing the comments and hope to get their proposed changes to the Division administrator in the next few months, with a goal of getting the changes implemented this fall. If we have any changes that we feel strongly should be adopted immediately we need to get them in ASAP!
 - b. Safety & Buildings has already started drafting the Scope Statement outlining their plans to begin updating the entire Commercial Building Code. They will use the now complete 2003 IBC update as the basis of the Wisconsin code update, but they will include any 2006 update information that becomes available. Some of these 2006 changes are already online and being included in their mid-code update supplementary materials. S&B is planning to reconstitute the Energy Code Council and make it one of the first working groups to convene. They are still working on a timetable, but hope to get the council formed and start meeting this fall.
 - c. Doug Johnson asked why ASHRAE 90.1 was not updated with recent commercial code revision? It was explained that the s. 101.027(1)(b) Wis. Stats. defines "Standard 90.1-1989" as ASHRAE 90.1-1989. Even though ASHRE has issued a 1999 version and are working on a 2006 version, since ASHRE 1989 is still in existence and not just amended, Commerce felt that the statute limited what they could do.

NOTE: Section 101.027(3)(a) Wis. Stats. says "the department shall begin a review under sub (2) whenever one of the following occurs:

- 1. A revision of standard 90.1-1989 is published.
- 2. Five years have passed from the date on which the department last submitted to the legislature proposed rules changing the energy conservation code."

The Department of Commerce has not considered ASHRAE 90.1-2001 a revision to ASHRAE 90.1-1989 because the number of the year is different. This may have been the intent of the legislature, but it is unlikely, since each revision to 90.1 changes the year designation. A change in the legislation dropping the "1989" would eliminate any misinterpretation.

3. WE Energies Building Code Collaborative Progress Report - Judy Mathewson gave a brief history of how the WE Energies Building Codes Collaborative (WEBCC) came about. Two years ago with its mission statement WE Energies committed to sponsor a group of about 20 experts to see what energy efficiency improvements should be made within the Wisconsin Energy Code. Don Hynek of the Div. of Energy gave a summary of the WEBCC residential code revisions being proposed to Commerce, including mercury thermostats elimination, and elimination of B-vent water heaters. The B-vent proposal is currently be considered by the Wis. Builders Association, but it has not gone to Commerce yet. (see attached issue paper)

Several commercial code proposals have already been developed and are ready for consideration. The first has to do with changing the way that lighting power (watts per sq ft) is calculated. The proposal is to change the lighting area tables that are currently in Comm 63 and use values included in the current ASHRAE 90.1. The other proposal deals with the building envelope. The WEBCC is likely to advocate elimination of the ACP (alternate component package) method of shell design. This code method was originally part of the "home grown" Wisconsin building codes and is not of much use now that we use the IBC/IECC. Another proposal under review is to reduce the maximum allowable window u-factors in some categories of commercial buildings. As the marketplace for high efficiency window products has grown higher volumes/lower prices of low-e glass has become the mainstream. These measures should not be onerous for builders to implement.

Jim Boullion or Judy can get more information on what the collaborative is doing if anyone is interested.

During this discussion Norman Bair of the DOA Div. of Energy reported that his agency has developed a number of ideas on how to make Wisconsin's building codes more efficient.

• It was moved and seconded that the DOA Division of Energy provide the best of these energy efficiency proposals to the workgroup. Passed unanimously.

David Simon felt that it was important that before this group endorses any proposals that we need to have some cost/benefit/payback period analysis to look at.

Judy stated that there are experts on the lighting and windows on the collaborative.

Jim stated we can try to get the cost analysis to the building organizations and then consider whether to try to support any of these proposals with the quick fix this month.

The thermostat proposal is already in the Commerce UDC Council process.

Don thinks the water heater cost analysis can be updated but most of the numbers are still valid.

The windows proposal is covered in the Comm 63 envelope part.

Judy stated that the AFUE of furnaces is something that is not being addressed yet. Randy Schneider thinks there is a great amount of savings to be had with a direct fired unit over an indirect fired unit in some commercial/industrial installations.

Jim will invite Randy to the Collaborative's next meeting when they discuss the HVAC issues.

- 4. Joint Presentation by Norman Bair, Division of Energy, and Abby Vogen, Energy Center of Wisconsin
 - a. Norman Bair Gave an overview of the Division of Energy and the programs that it helps to operate such as the Focus on Energy program. In addition, Norman presented an outline of how he would suggest the Building Codes Workgroup of the Governor's Task Force might proceed in its efforts (see attached).
 - b. Abby Vogen Abby's presentation built on what Norman discussed, but added that while we have good information on energy use in residential homes, we do not have it for commercial buildings. Doug Johnson asked how much it would cost to get this information? Abby said it costs as much as you want to pay. This is also an issue that was brought up at the Gov's task force meeting, requesting money for a "potentials study". She said that going to a national building code was very important for Wisconsin, and we need to support Commerce in what they are trying to do.

We also need to raise the effectiveness of the building codes by encouraging voluntary "beyond codes" practices. Utilities are trying to provide new construction programs that Focus on Energy is not currently funding. There is no equivalent commercial code training like there is UDC training. Senator Cowles has tried to introduce legislation to improve codes more. A better outdoor lighting code is another issue that should be considered. Natural lighting in commercial buildings could be more effectively applied, as it is in code. Incorporating acceptance testing (commissioning) into the code would also help. However we should probably focus most of our attention on heating, lighting as the best opportunities for gains. Jim asked Abby for a listing of the key points that she discussed today.

- 5. Senator Fred Risser: Brought a letter that he had just received from John Stolzenberg, Chief of Research Services, of the Legislative Council in which he researched the statutory restrictions and requirements that affect energy issues in Wisconsin's building code. Because the meeting was running late discussion of this paper was delayed until the next meeting.
- 6. Keith Reopelle asked that the Building Codes workgroup also take a look at a the report of what has been done in Maine.
- 7. Next meeting: Tentative Date is May 11th. A survey will be sent to everyone to confirm the date and time.
- 8. Adjournment.